

Serial No. 09/289,843
Filed: April 9, 1999
Examiner: R. Gorr
Group Art Unit: 1711

- (i) from about 10 to about 70 percent by weight of a phthalic acid based material ;
- (ii) from about 20 to about 60 percent by weight of a hydroxylated material having a functionality of at least 2; and
- (iii) from about 1 to about 40 percent by weight of a hydrophobic material having:
- (1) from one to six radicals, the radicals being selected from the group consisting of carboxylic acid groups, carboxylic acid ester groups, hydroxyl groups, and mixtures thereof;
- (2) hydrocarbon groups totaling at least 4 carbon atoms for each radical present; and
- (3) an average molecular weight of from about 100 to about 1000;
- wherein the hydrophobic material is substantially free of dimer acid; and

(II) from 0 to about 80 percent by weight of a polyether polyol; and

(b) from about ¹⁰ to about 35 ^{parts per hundred parts of polyol} of a C₂-C₇ hydrocarbon

blowing agent.

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A²
15. (Amended) A method for preparing a rigid closed-cell polyisocyanate-based foam, comprising reacting a polyisocyanate and a polyol based resin blend, wherein the polyol based resin blend comprises:

B
(a) ~~from about 65 to about 99 percent by weight of a~~
polyol component comprising:

(I) from about 20 to about 100 percent by weight of an aromatic polyester polyol reaction product formed by inter-esterification of:

(i) from about 10 to about 70 percent by weight of a phthalic acid based material ;

(ii) from about 20 to about 60 percent by weight of a hydroxylated material having a functionality of at least 2; and

(iii) from about 1 to about 40 percent by weight of a hydrophobic material having:

(1) from one to six radicals, the radicals being selected from the group consisting of carboxylic acid groups, carboxylic acid ester groups, hydroxyl groups, and mixtures thereof;

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(2) hydrocarbon groups totaling at least 4 carbon atoms for each radical present; and
(3) an average molecular weight of from about 100 to about 1000;

wherein the hydrophobic material is substantially free of dimer acid; and

(II) from 0 to about 80 percent by weight of a polyether polyol; and

(b) from about ¹⁰ to about 35 ^{parts per hundred parts of polyol} ~~php~~ of a C₄-C₇ hydrocarbon blowing agent.

Please add new claim 17 as follows:

17. A polyol based resin blend comprising:

(a) from about 65 to about 99 percent by weight of a polyol component comprising:

(I) from about 20 to about 100 percent by weight of an aromatic polyester polyol reaction product formed by inter-esterification of:

(i) from about 10 to about 70 percent by weight of a phthalic acid based material ;

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(ii) from about 20 to about 60 percent by weight of a hydroxylated material having a functionality of at least 2; and

(iii) from about 1 to about 40 percent by weight of a hydrophobic material having:

(1) from one to six radicals, the radicals being selected from the group consisting of carboxylic acid groups, carboxylic acid ester groups, hydroxyl groups, and mixtures thereof;

(2) hydrocarbon groups totaling at least 4 carbon atoms for each radical present; and

(3) an average molecular weight of from about 100 to about 1000;

wherein the hydrophobic material is substantially free of dimer acid; and

(II) from 0 to about 80 percent by weight of a polyether polyol; and

(b) from about 10 to about 35 php of a C₄-C₇ hydrocarbon blowing agent.